

### **DETAILED ACTION**

1. Acknowledge is made of the notice of appeal received on Oct. 20, 2010.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence D. Eisen, Reg. No. 41009 on November 16, 2010.

(1). Claim 14 in the application has been amended as follows:

Replace claim 14 with the following: --

**14. Apparatus for preparing a signal, which is one of the UMTS and GSM signal, and has been received at a wireless communications device, to be processed by a receiver which will attempt to recover information conveyed by the signal, the apparatus comprising:**

**a filter to filter the signal in a digital form having samples appearing at a sample rate; and**

**an adjuster to adjust the sample rate,**

wherein the filter filters the signal in both a first manner which is required when the receiver is a UMTS receiver and a second manner which is required when the receiver is a GSM receiver,

wherein the adjuster performs adjustments to the sample rate when the receiver is the GSM receiver and the adjustments comprise altering the sample rate before the signal is filtered to permit the filter to perform filtering in the second manner and altering, using a combination of an interpolator followed by a decimator, the sample rate after the signal has been filtered to provide the signal with a sample rate required by the GSM receiver, whereas the filter performs filtering in the first manner without the adjustments to the sample rate when the receiver is the UMTS receiver,

wherein the filter comprises an FIR filter with adjustable tap coefficients which can be adjusted to allow the filter to perform filtering in the first manner and in the second manner. --

(2). Claim 20 in the application has been amended as follows:

Replace claim 20 with the following --

**20. A method of preparing a signal, which is one of the UMTS signal and GSM signal, and has been received at a wireless-communications device, to be processed by a receiver which will attempt to recover information conveyed by the signal, the method comprising:**

filtering the signal in a digital form having samples appearing at a sample rate using a filter to filter the signal in both a first manner when the receiver is a UMTS receiver and a second manner when the receiver is a GSM receiver and making sample rate adjustments to the signal when filtering is to be performed in the second manner but no sample rate adjustments to the signal when filtering is to be performed in the first manner,

wherein said adjustments comprise adjusting the sample rate before the signal is filtered to permit the filter to perform filtering in the second manner and adjusting the sample rate after the signal has been filtered to provide the signal with a sample rate required by the GSM receiver,

**wherein adjusting the sample rate after the signal has been filtered comprises adding samples using an interpolator and then removing samples using a decimator, and wherein the filter comprises an FIR filter with adjustable tap coefficients which can be adjusted to allow the filter to perform filtering in the first manner and in the second manner. --**

(3). Claim 25 in the application has been amended as follows:

In claim 25, lines 11, insert -- **rate** -- between “sample” and “of the filtered signal”.

(4). Claim 37 in the application has been amended as follows:

Add a period -- . -- at the end of this claim.

***Allowable Subject Matter***

3. Claims 14, 15, 17-21, 23-26 and 28-37 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

The independent claims (claims 14, 20, 25 and 32) of the instant application have been amended to recite, among other limitations, a receiver that would digitally filter both UMTS and GMS signals. The sampling rate of the received GMS signal is adjusted before and after the GMS signal is digitally filtered. However, the sampling rate of the received UMTS signal is not adjusted before and after the UMTS signal is digitally filtered.

The Examiner find other limitations of the independent claims in the prior art by Minnis et al (US 6,954,628 B2) except the limitation that the UMTS signal is digitally filtered without the adjustment to the sampling rate. Extensive search failed to find this limitation for such a circuit as described in the independent claims. The Examiner therefore considers this limitation

unique and allowable. Because all the independent claims comprise this limitation, the independent claims are rendered allowable. Since claims 15, 17-19 and 35 are depending on claim 14, claims 21, 23, 24 and 36 are depending on claim 20, claims 26, 28-31, 34 and 37 are depending on claim 25, and claims 33 is depending on claim 32, the dependent claims are become allowable accordingly.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIHONG YU whose telephone number is (571) 270-5147. The examiner can normally be reached on 8:30 am-7:00 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on (571) 272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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